

WATERFRONT MASTER PLAN



January 2020

Prepared By





Prepared for the Town of Dillon

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Executive Summary

The Town of Dillon has made admirable progress in modernizing their marina and waterfront facilities over the last decade. These improvements to the marina and waterfront followed projects identified in the 2008 Dillon Waterfront Master Plan. The 2008 Plan is over ten years old and time for revisiting to reflect current needs and desires at the facility for update and expansion. The 2020 Dillon Waterfront Master Plan Report documents concepts and strategies for furthering the development of the waterfront of Dillon through a series of phased projects with prospect of implementation over the next ten to twenty years.

The 2008 Dillon Waterfront Master Plan identified thirteen marina related projects for improving the safety and profitability of the facility. Implementation of most of these projects and others not identified in that report have improved the operations of the Marina and enhanced the waterfront of the community. A revisit to the 2008 Master Plan will continue the momentum of waterfront enhancements.

Crucial to the next phases of development is to document current facility needs identifying areas for improvement to meet the needs of users and promote the unique waterfront setting of the Town of Dillon. The 2020 Dillon Waterfront Master Plan documents the progress achieved to date and illustrates desirable improvements to continue the progress at Dillon Marina and the Town's waterfront. A separate report, Dillon Town Core Master Plan, is a companion to this document that describes in more detail the improvements to business district of the community, "Village Place Center". These two Master Plans give a comprehensive view of the potential connections to the waterfront and entertainment potential of the Town.

The 2020 Waterfront Master Plan is a community lead effort with input from stakeholders, local officials, and community members. A public survey with summarized finding gives a user's perspective to the marina and guides future improvements. Project meetings and the public survey occurred during July through October 2019 to capture the Dillon Open, the largest waterfront event in the community as well as boat pullout and storage. In addition, discussions with stakeholders also provided insight to ever-expanding winter month use of Lake Dillon and the waterfront.







1.0 Introduction

1.1 Waterfront Overview

Lake Dillon continues to provide drinking water to the City of Denver, some added snow making capabilities to local ski runs, and quality recreation opportunities for those who live, work, and play in Dillon. As Denver continues to grow, their water demands have increased pressing demands on Lake Dillon by the Denver Water Board. These water demands lead to occasional dramatic drawdown of Lake Dillon, sometimes by more than 40 vertical feet. Extending the gangways and moving into deeper water was just one of the recommendations from the 2008 Master Plan for these extreme conditions.



2008 Dillon Waterfront Master Plan

The 2008 Dillon Waterfront Master Plan outlined 12 task of implementation projects. Those task are as follows.

1. Utilities and Infrastructure Development
2. Road Realignment and Launch Ramp Improvements
3. Amphitheater Parking
4. Parking Structure
5. Marina Central Zone
6. Marina Service Area

7. Wave Attenuator
8. Dockage
9. Wharf Structure
10. Alpine Gardent
11. Emergency Access Drive
12. Bike Route Realignment



2010 Aerial photo of the Dillon Waterfront prior to implementation projects from the 2008 Master Plan



2015 Aerial photo of the Dillon Waterfront showing improvements



Following the guidance of the 2008 Master Plan several projects have been accomplished at the marina and throughout the Waterfront.

Marina Improvements During the Last Decade

1. A 660' long sheet pile retaining wall replacing the old Gabion basket wall. This vertical wall replaced a sloped shoreline, straightening it and moving outward significantly increasing the capacity of the upland storage yard. The older wall was primarily comprised of Gabion baskets with several structural failures and needed replacement. Some areas of the shoreline had no retaining system. The western end of the marina still has approximately 400 lineal feet of Gabion wall structure
2. The base of the boat lift crane was replaced with a more substantial base. An additional lift crane base to facilitate a second boat launching facility was a part of the service improvements.
3. A new layout for the public parking area provides expansion of the lot with paved surfacing that provide significantly more parking (approximately 238 slots). An upper lot was also developed where the former turnaround and mast stepping station once existed (approximately 36 slots).
4. Water, sewer, gas, and electrical utilities were upgraded and extended throughout the site in anticipation of movement and expansion of buildings on site.
5. The storage yard was paved with asphalt after completion of the retaining wall and utility upgrade projects. The paved surface allows for more efficient storage, safer travel, and less site dust.
6. Replacing some of the gangways with longer ones to decrease the slope during low water conditions.
7. The access road to the marina was realigned and lanes for AIS (Aquatic Invasive Species) decontamination and mast stepping have been added.
8. Replacing the floating wave attenuator on the marina's western edge. The replaced attenuator had galvanized sheet walls in the water for wave reduction that had corroded past useful protection. The replacement attenuator walls are concrete and have a life expectancy of more than 20 years.
9. The addition of an experimental wave attenuator west of the boat launch for protection in launch and retrieval as the water taxi docking. The plastic barrel wave protection is minimal and limited attenuation is occurring.
10. Relocation of the yacht club to the east end of the paved storage yard. The move of the



Sheet wall/ service yard expansion project



Additional lift crane base



Expanded and paved parking lot



Expanded and paved service yard



Additional gangway being installed





Realigned marina access road and redesigned parking lot



New wave attenuator



Barrel attenuator



Yacht Club



New metal steps to Town Core

club reduced congestion at the confluence of the Yacht Club, Tiki Bar, Store and rental building.

12. Installation of a galvanized steel stairway connecting the town core to the new parking area.

Waterfront Improvements During the Last Decade

1. Completion of the bike path around Lake Dillon at the amphitheater. Used by pedestrians and cyclists alike, this path runs above the marina and amphitheater and is very popular.
2. Rebuilding and expansion of the amphitheater facility has allowed for better service, ticketed concerts, and includes a new (summer only) restroom facility.
3. A park pavilion and play area was built above the lake slope between the amphitheater and the marina.
4. Reconfiguration of the amphitheater parking increases parking capacity.
5. Removal of the Crow's Nest feature.



Reconfigured Marina Park/Amphitheater parking lot



Amphitheater expansion



Completed bike path



1.2 Current Operations at Dillon Marina

Developing goals for the marina requires an understanding of the various marina operations. At Dillon, a larger than common number of revenue streams provide profits for the marina and variety for the customer. Currently, there are:

- Seasonal slip rentals
- Boat rentals
- Kayak and Stand Up Paddleboard (SUP) rentals
- Boat Service facilities
- Boat Crane (not used as a revenue producer)
- Boat Storage (winter and summer)
- Boat launch
- Retail sales
- Fuel sales
- Fishing guide services
- Food and beverage sales
- Water Taxi to/from Frisco
- Yacht Club and Juniors facilities
- Sailing school
- Vehicle parking

Within these operations, boat rentals, slip and mooring leasing, and marine service work represent the largest revenue generators.

Of these operations, the stand-up paddleboard and kayak rentals, fishing guide services, and Tiki Bar food and beverage sales are leased concessions to independent contractors.

Essential to the success of the marina evolution is improvement in separating work tasks from the public, front and back of house uses. Cross traffic between service vehicles and pedestrians remains a problem at the marina. The most dangerous location being between the current service/store building and the Tiki bar/ docks.

In addition to the basic operations within the marina, peripheral operations are beginning to surface around the Dillon waterfront. Bicyclists and pedestrians are using adjacent trails and venturing into the marina to enjoy the Tiki Bar treats or access the marina, fishing services or kayak/paddleboard rental.

Winter usage of Lake Dillon has increased dramatically since the 2008 Master Plan. Ice fishing has been the most significant growth from almost nonexistent to very popular activity in a short time span. Access to the ice occurs at the boat launch and along the northeast end of the service yard.



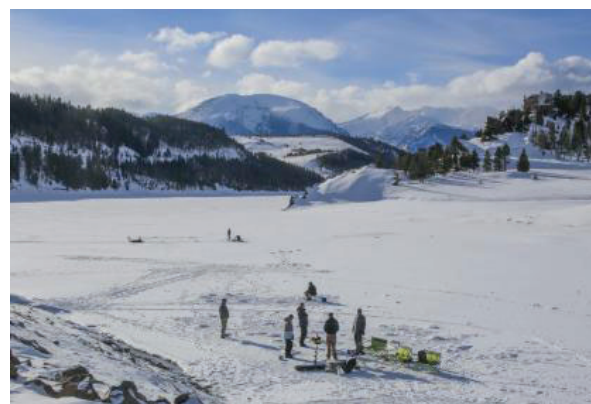
Kayak/paddleboard rental



Marina parking lot winter boat storage



Water taxi



Ice fishing (Courtesy Dillon Vacation Activities and Things to Do)



Paddleboards in Lake Dillon





2.0 Goals and Objectives



Dillon Marina - service yard and connections implemented since 2008



Dillon Amphitheater - upgrade to stage, new restrooms/concession, and connections since 2008

2.1 Waterfront Goals and Objectives

Dillon Marina Goals

Discussions of the goals appropriate to this revision of the master plan were held with marina management, stakeholders, and the Town staff. It was agreed to concentrate on projects that increased revenue or increased safety. Goals include:

1. Better separation of marina industrial activities from public recreation activities
2. Upgraded visitor facilities especially restaurant/ Tiki Bar, parking, and rental services. Eventually, boat rental services will be separated from non- rental retail. This should enhance the experience for both users.
3. Linking the water taxi services with better trails and wayfinding signage.
4. Completion of shoreline (sheet pile and Redi-Rock) upgrades
5. Development of a new launch ramp for service work. Replacement of the existing service building with a new and upgraded one to east to integrate service activities into one area.
6. Upgrading SUP and Kayak rental facilities.
7. Improved access from town and parking areas to waterfront.

Dillon Marina Objectives

The objectives include:

1. Expansion of the Dillon marina and waterfront's facilities to enhance its reputation as a recreation destination.
2. Connection of the Town Center to the waterfront.







3.0 Preliminary Concepts

3.1 Stakeholder Meetings and Preliminary Concepts

The Dillon Waterfront Master Plan 2020 began with a project-scoping meeting in April 2019. At that time, the parameters for the project extent was defined as the entire waterfront properties bounded by the marina connection at Gold Run Street on the east to the Amphitheater on the west. Added to the scope later was the potential development of a public beach located southwest of the amphitheater stage structure. In addition to the waterfront scoping, the Town of Dillon requested a study for the enhancement of the walkability in the core of the community. The Dillon Town Core Master Plan is a companion report to tie together a pedestrian friendly community with a dynamic waterfront amenity not found anywhere else in Summit County.

Early in the process, a stakeholder group provided input and guidance for concept development and consensus. Stakeholders include marina management and staff, Town management, outside vendors, and marina users. The initial stakeholders group was selected by the Town of Dillon; these stakeholders all have interactions with the waterfront facilities and have long been influential in the growth and health of the marina and its associated activities.

The Waterfront Stakeholders Group

- Tom Acre, former Town Manager
- Carri McDonnell, Finance Director
- Kerstin Anderson, Marketing and Communications Director
- Suzzane Phillipson, Events Coordinator
- Craig Simson, Marina Operations Manager
- Karlee Ferris, Marina Office Manager
- Frank Keesling
- Jason Lederer
- Jeff Crandall
- Judy Jordan
- Leif Nielsen
- Nicholas Oliva
- Randy Ford
- Robert Nold
- Scott Boettcher
- Scott Jacobs
- Scott Snyder
- Thor Borreson

Thanks to all of these stakeholders for their efforts and input, a path to developing plans began with their guidance. Additional thanks to Dan Burroughs, Town of Dillon Engineer for his support and sharing recent plans implemented since the 2008 Dillon Waterfront Master Plan.

3.2 Project Scoping

Marina staff, town staff and the Town Manager attended the Initial April scoping meeting for the waterfront. The project parameters and consultant's roles and responsibilities from the initial scoping meeting outline the framework for the Master Plan efforts for the Waterfront and Town Core. A site walkthrough at the marina and Town Core provide a photographic database to document current conditions and generate ideas. Following the walkthrough, additional information was collected at the first round of meetings with Town staff and stakeholders. In addition, the Town provided the consultant a series of project plans and community updates as background data for the project. Over the last decade, the Town of Dillon has been evolving and a comprehensive map of the new developments is nonexistent. In order to create a Master Plan for the marina and Town Core, MSA compiled the entire available site plans into a digital base for both Master Plan projects. The base plan includes the entire waterfront identified in the April meeting as well as the Town Core between Dillon Town Park and the waterfront.

Initial Stakeholders Meeting

A more robust gathering of information from stakeholders in August 2019 adds a wealth of insight for the Master Plan. Establishing goals and objectives and potential projects for the waterfront came from the meetings.

The stakeholders identified the nature of the Dillon Marina experience, defining the variety of services made the marina capable of providing a range of water related recreational activities. Existing services continue to add to the Dillon Marina experience such as:

- Seasonal slip leases
- Boat rentals, sailboats and pontoons boats
- Sailing School
- Boat Service
- Boat Storage
- Retail store
- Yacht Club
- Tiki Bar
- Launch ramp

Since the 2008 Dillon Waterfront Master Plan, several new services have become available at the Marina, which add complexity and variety to the experience and will support future uses.

New Services

- Multiple fishing charters, with summer and winter (ice fishing) guide services
- The Summit Shuttle, an expanded water taxi service to and from Frisco
- Stand up paddleboard and kayak rentals



- Expanded boat tour events (Women and Wine on the Water, Sunset Tours, etc.)
- Stakeholders from these new services are participants in the Master Planning effort. Additional site improvements, suggested by the group, identify several opportunities at the facility.

Stakeholder Input

Recommendations by the stakeholder group identifies issues and solutions to provide enhancements to the waterfront. Opening the restroom at the amphitheater to offer year round access. Access to restrooms will benefit the growing number of people ice fishing. Stakeholders also identified the need to expand the usable seasons for the waterfront. Other winter activities to ice fishing include ice boating, kite boarding and evolving sports continue to add to the use of Lake Dillon in a season that was once more dormant.

Improved SUP rental structures, an office for the fishing guides, and other season expanding facilities led to the idea of using repurposed shipping containers for small pop up stores along the shoreline west of the launch ramp. The concept of the Pop Up Stores shifts the intent of the in lake pier plan from the 2008 Dillon Waterfront Master Plan to a shoreline complex that creates an inviting pedestrian space along the uplands.

The new wave attenuator, A Dock, improves the protection the marina and suggestions made to move west of the boat launch and extend outward add value to the overall boating experience. Waver reflection occurs at the current location of A Dock creating a chaotic wave environment for the water taxi and launch ramp dock.

The Summit Shuttle is expanding its role on Lake Dillon, the operator plans on increasing capacity by adding more boats and introducing a dinner cruise option. During the stakeholders meeting, it became clear that the landing for the shuttle and the connection to the Town Center and other upland uses needs improvement. In addition to relocating and extending A Dock, incorporation of a wider dock area can serve as a safer and inviting space for visitors using the water taxi. A sheltered landing with shelter from sun and rain for the shuttle at the top of the gangway and near the Pop Up Store location. Improvements to walkways connecting the marina, Pop Up Stores, while also expanding accessible paths to Marina Park and the amphitheater, will connect the waterfront to the Town Core. Enhancements to a wayfinding system to better inform visitors to the vast opportunities that the Town of Dillon has to offer.

The existing Dillon Marina service and visitor spaces intertwine. A revisit to the 2008 Master Plan continues the desire to separate the two distinct uses at the facility. The first step in improvements is to move the service building to the east end of the service yard to distance the uses from the public zones around the Tiki Bar and rental/store. Adding a service only boat launch reduces the need to move trailered boats past the pedestrian zones freeing up conflict and reducing the potential for accidents. The separation of service and visitors is still a high priority of the Town and stakeholders.

Parking needs of the Town of Dillon and the marina are an ongoing discussion. The potential

of a parking structure with revenue generating covered winter boat storage continues to be a priority of the Town. The 2008 Master Plan began the discussion of a subterranean parking structure that limits blocking views for residential units and is the focus of a parking study by Walker Consultants, as adding stalls in a strategic location. Parking continues to be an issue for the waterfront of the Town of Dillon with the ever-expanding uses that are enhancing visitor experiences.

The Walker Consultants Parking Study evaluates the Town Core as well, identifying locations and phasing of parking expansion. The Study also identifies initial cost profiles for parking options in the Town Core and at the marina. The parking structure at the marina has two options with the difference being a variation of the total count of lower level stalls being half to full layout under the upper surface lot. Each had a design constraint of not affecting the lake view from the adjacent condominiums. Excavating the slope between the marina and condominiums where the existing marina parking lot is located will accomplish meeting the constraint. Stakeholders recognize that a structure like this would not only support the marina, but also can supply valuable covered winter boat storage, add capacity during events at the amphitheater, support Town Center parking, and possibly create revenue by leasing space for outside uses.

The 2008 Dillon Waterfront Master Plan began the discussion of a multipurpose facility with views of the marina and Lake Dillon as part of a waterfront enhancement. The multipurpose building can house a destination restaurant, kitchen facility for the Tiki Bar, a banquet hall for events such as weddings or business meetings, the Yacht Club, rental counter and marina store. Utilizing a portion of the retaining of the parking structure lessens the impact of the foundation for the multipurpose building and provides direct connection to parking. The multipurpose building can house an elevator structure for accessible connection within the building as well as from the top levels of the parking structure to the marina.

Preliminary Concept Meetings

In October 2019, a concept plans presentation in a third series of meetings in Dillon where initial concepts and prioritization of projects was the focus with stakeholders. Several council members attended the presentation. The feedback from the October sessions provides the foundation for the comprehensive Master Plan of the waterfront. The stakeholder's questions and ideas concerning design intent and cost ramifications with priority form are:

1. Movie and extend the wave attenuator to improve the water taxi dock and launching of boats. This improvement provides boating safety and allow for extra slip lease revenue. Improving the connection of A Dock to the upland with an ADA ramp and adjacent Pop Up Stores creates a sense of arrival and waterfront destination.
2. Relocation of the service building to the east end of the service yard and developing an adjacent new service only launch ramp. The relocation of the service building is essential to prepare the marina site for the parking structure and multipurpose building.



3. Development of the parking structure and multipurpose building would transform the waterfront into more of a hub for the entire Town, expand the usability of the marina into a multi-seasonal facility and provide much needed event parking.

Additional Project

4. Realignment of the Marina Drive as part of the parking structure project to redirect traffic away from the marina service yard at the lower shoreline, toward parking stall instead. The realignment will also correct some visibility and wayfinding issues with the Drive.
5. Improve the turnaround access at the launch ramp concurrently with the Marina Drive realignment. The appropriate expansion of the diameter of the turnaround to will improve launch and retrieval times streamlining the turning motion of vehicles with trailers.
6. Complete the shoreline upgrades that began in 2010. The gabion baskets on either side of the 2010 steel sheet wall project are in poor condition. Expand options for wall treatment to enhance the visibility of the shoreline and provide a handrail for safety purposes.
7. Tiki Bar upgrades and creating a larger surrounding plaza area will increase summer usage and make the experience that much more enjoyable.
8. Fuel system upgrades to update and provide a safer experience. Relocate the storage tanks to underground with easy access by delivery while also adding diesel fuel as an alternative.
9. Connect the marina service yard of the marina to Gold Run Street to allow emergency vehicles to access remote areas and reduce travel times. Complete connecting water utilities along the emergency service road to improve system reliability.
10. Reconfigure the system to provide in water service area between the shore and docks for moving launching boats via the crane. Align C and D as well as E, F, and G Docks and connect with a head pier to limit gangway connects while improving connections and pedestrian flow into the service yard. Add stops to the intermediate floats at the gangways to promote longer, less slopes connection to the docks during low water periods.
11. Development of a public beach west of the amphitheater in Marina Park as a feature to the waterfront.



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4.0 Consensus Plan

Consensus Plan

Building on the successes of the 2008 Dillon Marian Master Plan, this update examines the next steps to furthering revenue production, continuing safety improvements, and maintaining cost containment. Additional amenities may add to the user experience, but these future improvements will be most successful if they meet at least one of these three essentials guidelines. Some of the projects within the steps listed in this section occur earlier to allow subsequent projects to take place safely and efficiently. The following steps outline an approach to improvements but are not limiting by a structured phasing plan. Projects can occur when appropriately funded or when needs create priority.

4.1 Step One: Waterfront and Attenuation

1. Relocate and Extend Wave Attenuator Dock

Relocation of A Dock, wave attenuator west past the launch and extending outward into Lake Dillon will provide wave protection for the marina as well as the boat launch ramp. The current location of A Dock creates an unpredictable wave climate around the ramp. Placement westward of the attenuation and extending the dock another 300 feet outward will provide full protection for the launch ramp; provide an opportunity for additional slips for the marina, create a suitable water taxi boarding station, and provide an accessible entry to the Town of Dillon for water taxi patrons.

The upland landing are for the gangway to the wave attenuator dock is a location for an upland plaza space for group gathering. An accessible gangway with adequate width and length offer safe connections to the water taxi.

Relocation of A Dock provides added revenue from slip rentals in the expanded portion of the attenuator and docking space for multiple water taxis or dinner cruise boats at a dedicated entry to the community with direct access to the Town Core.

Reason for priority: Safety, added revenue, and preparation for further marina expansion.

Actions:

- Relocate and extend A Dock, wave attenuator. Reuse the existing wave attenuation dock and extend another 300' outward with the potential of rentable slips space added to the system.
- Add water taxi platform to wave attenuator dock
- Add upland taxi gathering area/ shelter
- Add taxi wayfinding signs to the upland connection

Estimated Cost Range: \$330,000 to \$450,000

2. Pop Up Stores

Development of small rentable retail shops along Dillon's shoreline will create a destination as well as provide a distinctive waterfront from Lake Dillon. Repurposing shipping containers is a popular trend for creating Pop Up Stores. Shipping containers are available in 20 or 40-foot lengths. The Pop Up Store design creates unique small spaces for uses such as food service, mini bars, coffee shops, and retail. 2017 Town of Dillon Design Guidelines provides a standard for the design of the pop up stores to create a waterfront that blends with development occurring in the Town Core.

The site around the Pop Up Stores is an opportunity to develop a pedestrian plaza space reminiscent a linear waterfront boardwalk or promenade. The final detailing for the walk will most likely be either all hardscape or a mix of hardscape and boardwalk decking given the nature of the space and maintenance requirements. The waterfront in Dillon is linear with steep slopes leading up to the playground at Marina Park. There is an area near the boat launch suitable for minor site grading with strategic placement of retaining walls for placing the Pop Up Stores and surrounding pedestrian space.



Bakery



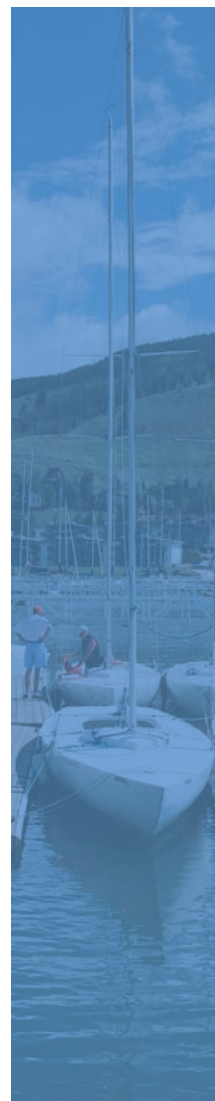
Sandwich Shop

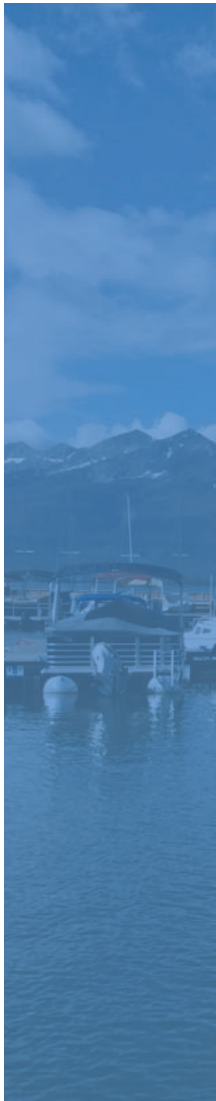


Ice Cream Shop



Coffee Shop





Development of the site for the Pop Up Stores includes site preparation and design of a utility corridor within the boardwalk/promenade with connections from the taxi stand to the existing trails that led to Marina Park and the Town Core. A shade structure at the entrance near the taxi landing will define a portal to this destination. Festive lighting and site furnishings add to the ambiance of the waterfront amenity.

Reason for priority: Revenue generating businesses at the waterfront that are active in the summer as well as winter with the capability of being flexible use spaces to match the seasonal change. The containers are movable and the configuration of the site can morph as needed.

Actions:

- Grade new walkway from water taxi landing to the Pop Up Stores. A portion of the walk may include an “elevated” boardwalk to provide views of the lake and a seating area. Maintain ADA accessible slopes throughout.
- Grade areas for Pop Up Store site and boardwalk/promenade.
- Provide utilities to Pop Up Store sites including: electric, water, sanitary, and (possibly) natural gas.
- Develop landing plaza between the Pop Up Stores and boat launch at the A Dock gangway. Provide wayfinding signs.

Estimated Cost Range: \$465,000 to \$600,000

3. Town Core Connection

Provide a paved connection between the Pop Up Store and Marina to the amphitheater and Town Core. A 6 foot wide walk utilizes a ramp system to traverse the steep slope of Marina Park. The ramps system requires retaining walls but with a compact design, the connection is limited within 150 lineal feet of the bluff. The switchback layout relies on the system as one unit for structural stability. Once the walk is at the level of the mast stepping and boat wash-down lanes of Marina Drive, the walkway has enough run to minimize grading to reach the Marina Park shelter and amphitheater.

Reason for priority: The addition of walks creates an accessible connection to Marina Park, Amphitheater, and Town Core from the Marina and Pop Up Stores. Provides a vibrant waterfront for visitors to enjoy with outstanding views of Lake Dillon and the surrounding mountains of Summit County.

Actions:

- Provide an accessible route from the Pop Up Stores or Marina to Marina Park, Amphitheater, and Town Core. A ramp system maintains a 5 to 8 percent slope on the walkway to meet compliance. A stairway at one end of the ramp system provides a direct route to the top of the bluff.

Estimated Cost Range: \$465,000 to \$515,000





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4.2 Step Two: Service Area Upgrades

4. Relocated/New Service Building

Reorganization of the current marina service yard and buildings is essential to developing separate public and service use areas or creating the front and back of house. The existing service building is located in the hub of activity for the marina. The building is undersized for some of the larger boats now in the marina. The structure has served maintenance and office uses for several decades.

Moving the service use to the east and adding a service launch ramp consolidates the work area and creates a more efficient service area in the Marina. The relocation of the service building to the east also clears its existing location for future development of a parking structure and multi-purpose building that function more appropriately for the front of house uses.

The retail store and the boat rental office are currently within the existing service building. Those facilities will ultimately be part of the public portion of the site, eventually within the multi-purpose building. A temporary site will house the rental office and store.

The new service building connection to utilities that we installed with the service yard paving project includes natural gas service eliminating the currently used propane tank. The service building also provides a second restroom location to shorten the distance for boaters at E and D Docks.

Reasons for priority: The existing service building location is in the area of the proposed parking and multipurpose building site and relocating it is essential for future development.

Actions:

- Upgrade SUP and kayak rental facility
- Replace and relocate the service building
- Add a second restroom facility

Estimated Cost Range: \$1,000,000 to \$1,250,000

5. Service Launch Ramp

An additional service only launch ramp at the east side of the service yard contains launch and retrieval of boats by staff away from the heavily used visitors area around the Tiki Bar and Marina Store/Rental Office. The service ramp will also reduce congestion at the public boat launch, reducing interaction with large service machinery in public areas.

The current location of the Yacht Club interferes with the use of a service launch ramp requiring relocation. Since it is a mobile structure, a new location between the juniors building and the



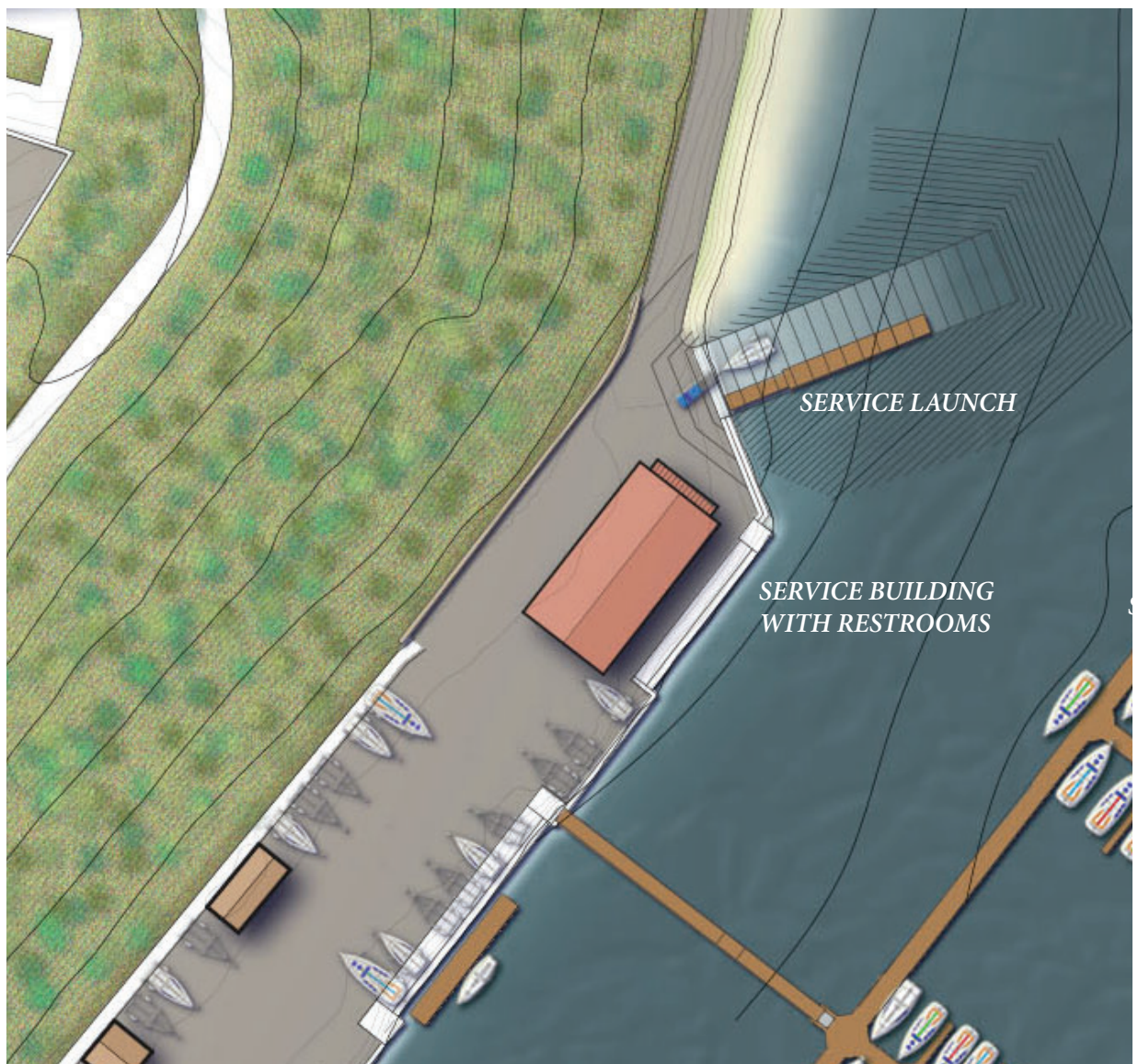
maintenance garage is an acceptable short-term location. Once the multi-purpose building is a reality, the yacht club can move into its final home.

Reasons for priority: Primarily safety and service efficiency. By separating the service work from the public spaces, a service personnel only ramp frees up conflicts.

Actions:

- Develop two lane, service only, launch ramp w/ boarding dock
- Relocate Yacht Club building

Estimated Cost Range: \$650,000 to \$800,000



Relocated Service Building Location and New Service Launch





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4.3 Step Three: Public Area Upgrades

6. Parking Structure

Parking for the town center, amphitheater, marina and possibly remote parking for nearby skiing facilities is central to the success of creating a destination for improving and supporting local businesses. The 2008 Dillon Marina Master Plan identified a multilevel structure as a solution for adding parking while benefiting from the sloping site at the marina parking lot. A follow-up report by Walker Consultants in 2019 furthered the discussion of structured parking in this location. Concurrent with the development of this parking structure is the connection of a multipurpose building overlooking the lake to house a rentable hall for events, the yacht club, restaurant and kitchen facilities for the hall and Tiki Bar, boat rental and ship's store facilities, and offices for marina related services.

Utilizing the slope of the bluff between the Lake Cliffe Condominiums and the marina at the site of the current surface lot lessens the impact of the viewshed to Lake Dillon. The parking structure is underground on 3 sides with limited openness to the Marina. Access is at the top and bottom levels and is accessible directly to the marina service yard for winter storage of boats.

The parking structure connects the access between the Town Core and Marina with an accessible sidewalk and ramp system. An elevator is possible as a standalone structure or part of a multipurpose building. An elevator tower can precede a multipurpose building as a prior phase. The ramp system may not be required if an elevator tower is built. The ramp system is an alternative.

Accessible parking stalls are located on the top and bottom levels of the structure with placement near the entrance to the multipurpose building and elevator.

Reasons for Priority: Economics and access. Cover boat storage in the lower level provides additional revenue for the marina while increasing storage capacity. Potential partnership with nearby ski resorts to share cost and revenue.

Actions:

- Excavation and development of a three story parking structure, depressed into the existing bluff to prevent loss of viewshed by the condominium owners. Based on the preliminary schematic from Walker Consultants presented to the Town of Dillon in 2019, this structure offers year round parking and some winter boat storage. A variation of option 2 from the Walker report represents nearly 700 parking spaces.

Estimated Cost Range: The parking structures estimated in a 2109 study by Walker Consultants includes a 509-space structure at \$16,000,000 and a 692-space structure at \$21,000,000 as options. At between \$30,000 and \$31,000 per parking space to be offset by significant expectation from revenue for Town Center Parking, boat winter storage, and remote



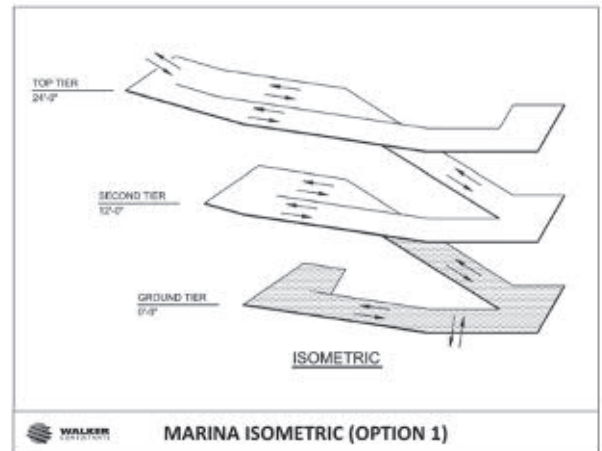
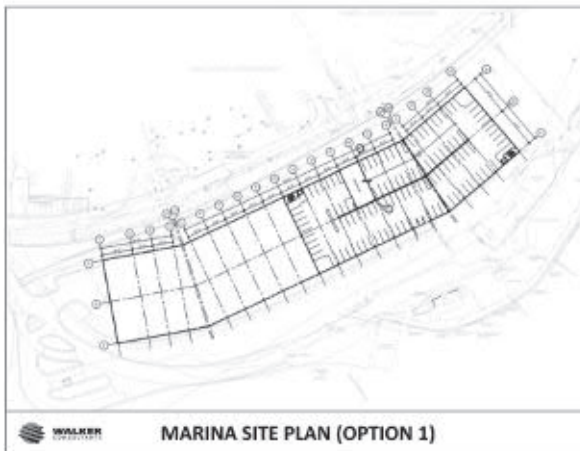
Option 1 (small version)



\$16M
Cost per Space: \$31k
Cost per Level: \$5.3M



Total Proposed Spaces: 509
Net Gain: + 255 Spaces



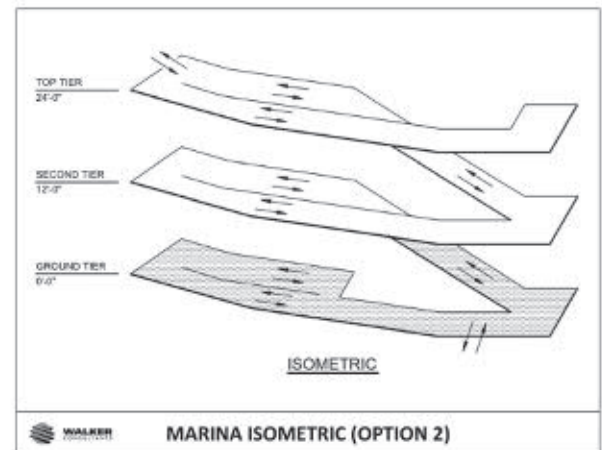
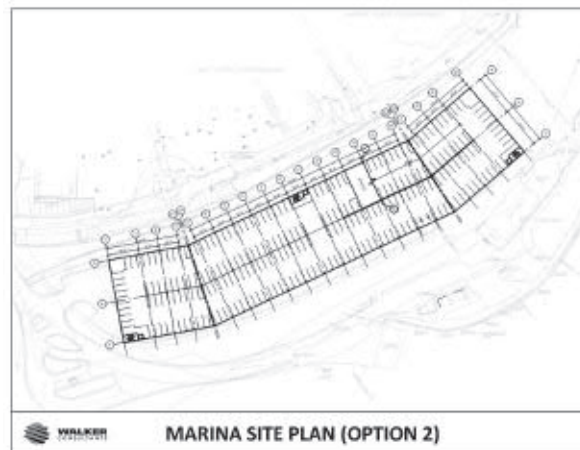
Option 2 (large version)



\$21M
Cost per Space: \$30k
Cost per Level: \$7M



Total Proposed Spaces: 692
Net Gain: + 438 Spaces



Walker Consultants Dillon Town Center Parking Study and Design Concepts - Marina Lot Options

parking for ski resorts.

7. Marina Entry Adjustment

As a result of the 2008 Master Plan, Marina Drive was reconfigured to reduce slope of the road and add a boat washdown/check point and mast stepping prior to launch of sailboats. Marina Drive directly links to the marina service yard. With the placement of a parking structure there is an opportunity to redirect most traffic to the parking lot. Most visitors arriving at the marina are there to use the facility and have no need bring vehicles into the service yard or public spaces near the docks.

Minor realignment of Marina Drive directs focus to the parking structure. The service yard access becomes secondary and branches off toward the sloping drive down to the boat launch. The area around the washdown and mast stepping station remains the same as currently found.

Reason for Priority: Provide a direct access to parking for most users with the boat launch and service access signed appropriately.

Action:

- Realignment of marina access road to connect to the parking structure
- Lessen and provide succinct wayfinding between parking and service uses.

Estimated Cost Range: \$120,000 to \$145,000

8. LAUNCH RAMP UPGRADE

Excavation for the parking structure creates an opportunity to enlarge the turnaround at the boat launch. Currently the turnaround is inadequate for full motion of larger trailered boats. The vertical wall of the parking structure, with regrading of the hillside, opens the turnaround site for expanding the diameter meeting-turning radius for the largest trailered boats on Lake Dillon.

Concrete pavement in the turnaround provides a durable hard surface pavement with longevity at the boat launch.

Provide a safe pedestrian walk around the outer diameter of the turnaround. A sidewalk on the north side of the turnaround moves pedestrians around and not through the boat launch.

Reason for Priority: Safe movement of trailered boats at the launch. Eliminate the need for multiple turning motions speeding up the process for launch and retrieval.

Action:

- Enlarge and complete a full circle turnaround
- Grade turnaround appropriately to provide a safe and pedestrian friendly area around the launching of boats.

Estimated Cost Range: \$135,000 to \$165,000

9. MULTIPURPOSE BUILDING

The vision for the multipurpose building is a public facility that enhances the waterfront experience by house a restaurant, the yacht club, marina store and rental desks as well as a support kitchen for separate locations in the marina such as the Tiki Bar and Pop Up Stores. As part of the restaurant, a rentable room provides a space for weddings, corporate meetings, family events and many other opportunities. The multipurpose building can be up to 3 stories with breathtaking views overlooking the marina, Lake Dillon and mountain ranges of Summit County.



The multipurpose building brings year-round use to the marina site. The building is a waterfront destination for the Town of Dillon. The parking structure allows for direct access to the building with covered and protected entries on lower levels.

The expectation is that the multipurpose building be three stories and built at the same time as the parking structure. However, both can be standalone projects. The parking structures is beneficial to the multipurpose building by providing one shared foundation wall, slightly lessening the impact and cost.

Reason for Priority: A year found destination for the Dillon waterfront. A unique placemaking facility.

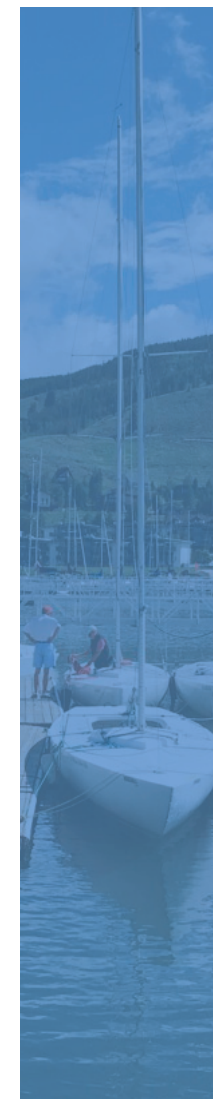
Actions:

- Development of a multipurpose structure attached to the parking structure and providing, at a minimum, the following facilities:
 - o Boat Rental Office, 400 SF
 - o Ship's Store, 1,008 SF
 - o Yacht Club, 1,000 SF
 - o Restaurant/ Tiki Bar Kitchen, 1,400 SF
 - o Multi-purpose Hall, 3300 SF
 - o Elevator from top floor to base level,
- Regrading of the areas around the multi use structure to provide public access and improved flow into and out of the marina facilities.

Estimated Cost Range: \$ 3.6 to \$5.5 million

Based on 12,000 to 18,000 sf of interior space.







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4.4 Step Four: Marina Improvements

10. COMPLETE SHORELINE

Replacement, realignment and restoration of the shoreline began in 2010 with the steel sheet wall project. This project replaced the gabions with a reinforced sheet steel pile wall that improved stormwater management of the site and increased the size of the marina service yard. Continued improvements at both ends of the marina from the 2010 project will complete this transformation.

The west shoreline of the marina from the end of the completed steel sheet pile to the public launch ramp requires upgrades to replace the remaining gabion basket that are failing structurally with degrading of the wire frames. Based on the existing bathymetric elevations, the new retaining walls will be a combination of steel sheet pile and supporting cast concrete blocks wall system.

The concrete block retaining walls forms have selections to create a desired effect. There are products, such as Redi-Rock Retaining Walls that with staining look similar to stone, blending into the natural environment of the Rocky Mountains. A handrail system near the Tiki Bar and plaza space provide safety for the heavier used pedestrian spaces.

Reason for Priority: Failing shoreline protection.

Actions:

- East end shoreline restorations in conjunction with the launch ramp project.
- West end shoreline restorations in conjunction with the turn around improvements and site improvements adjacent to the Tiki Bar.

Estimated Cost Range: \$800,000 to \$900,000

Shoreline improvements include the east wall at the boat launch, along the Tiki Bar, and short length at east shoreline near the service building and launch ramp.



Gabion baskets at Tiki Bar



Potential concrete block retaining wall option



Gabion baskets next to the steel sheet wall



Potential concrete block wall at the steel sheet wall

11. Tiki Bar

After the completion of the shoreline, the area between the multipurpose building and edge is ideal for a large pedestrian focused zone center around a new Tiki Bar structure. The Tiki Bar support kitchen is within the multipurpose building opening up the structure to a full service bar with expanded seating. The surrounding plaza space is flexible for holding varying events with outstanding views of the marina, lake and mountains.

The larger plaza space reduces the vehicular area conflicting with this pedestrian friendly zone. A few accessible parking stalls provide direct access to the plaza space and Tiki Bar area. The gate to the service yard is located east of the accessible parking stalls and completes the full separation of the front and back of house uses at the marina.

Reason for Priority: A pedestrian friend outdoor use area at the marina. Reduce the conflict of service vehicles and public using the Tiki Bar.

Actions:

- Reduce vehicular access
- Move service yard gate to full separate visitor and service uses.
- Create an outdoor activity zone for public use.

Estimated Cost Range: \$ 400,000 to \$450,000

12. Underground Fuel Storage

Fueling at Dillon Marina is limited to unleaded gasoline in a tank located at the dispenser on the end of B Dock. A more safe recommendation is to place an upland underground storage tank with a split tank capable of unleaded and diesel fuels near the service access road. The location of the storage tank is in an area accessible by the delivery truck, near the boat launch to utilize the turnaround. Fuel deliveries occur during low public use times usually early morning.

Reason for priority: A more safe fuel system than the current tank located on the end of B Dock. Limit fuel spills into Lake Dillon.

Action:

- Underground unleaded and diesel fuel storage tanks
- Support fuel line to shoreline

Estimated Cost Range: \$150,000 to \$190,000

13. Fuel Dock Expansion

The fuel system renovations include an entirely new dock system that adds up to thirty-four 30-foot slips. The improved fuel dock allows for fueling and sanitary pump out stations with access from either side of the dock.

A service hut near the pumps houses the payment center and provides shelter for marina employees.

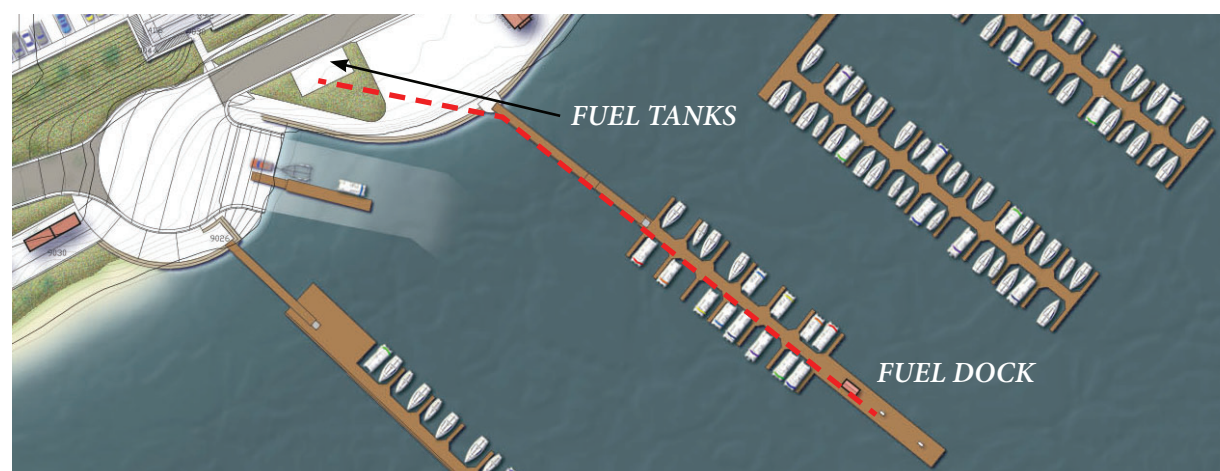
With reconfiguration of the overall dock system at Dillon Marina, reuse of one of the gangway systems provides access during low water periods.

Reason for priority: Expand fuel service area and type to include diesel. Add more slips for the marina rental fleet.

Action:

- Larger fuel dock with access from two sides.
- Reuse extended gangway system for low water access to the fuel dock.
- Add 34 slips to the marina.

Estimated Cost Range: \$250,000 to \$350,000



Multipurpose Building and Tiki Bar/Plaza



14. Emergency Service Road

Connecting the east end of the marina through the Stand-up paddleboard rentals and on to Gold Run Street is a goal of Town of Dillon emergency personnel. The emergency service road provides safety through access as well as act as a pedestrian walkway for those using the rental facilities.

In order to create a suitable emergency roadway, the site may require additional retaining walls to meet cross slope of the road. Update to the kayak/paddleboard storage area for rentals is a part of the road project.

Completing the water line from where it currently ends in the marina service yard to Gold Run Street will increase reliability and allow for a looped system with no dead ends and loss of pressure.

Reason for Priority: A second emergency access road to the marina.

Actions:

- Provide an emergency access at eastern end of the marina to Gold Run Street with a limited access road. Grading of the site will need to expand the existing pathway to meet design width for emergency vehicles and to maintain reasonable cross slopes.
- Extend the water system from the existing marina to the system on Gold Run.

Estimated Cost Range: \$325,000 to \$375,000

15. Dock Improvements

The goal of the 2008 Dillon Marina Master Plan was moving the slips out into deeper water to eliminate the need to push the system by heavy equipment. One way provide accessible gangway connections in extreme low water conditions is to limit the number of access points.

Reconfiguration of the dock with the addition of head piers will open the space along the vertical wall where the service crane can maneuver more freely. Three interior basins are well protected and large enough to store large boats short-term or hold learn to sail programs with youth sailing.

The docks at Dillon splay to align perpendicular to the shoreline. The head pier layout aligns all of the docks and creates space for an additional dock system, enlarging the capacity of the marina. The realignment of all of the docks does not require more gangway.

These intermediate landing will eliminate the need to move the docks during low water events. Cross tied docks will limit the number of gangways required and provide clear access to existing crane

Reason for priority: Added safety during low water events, increase efficiency and reduce seasonal maintenance costs by not having to remove and replace gangways twice annually.

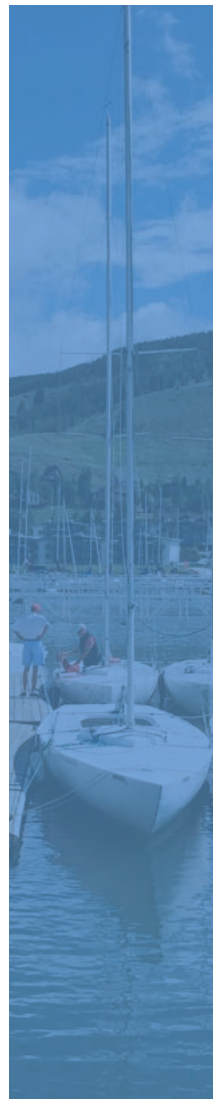
Actions:

- Remove separate upland attachments for D and F Docks, add Collector docks to connect D and F to E dock.
- Add intermediate landings and added gangways for A and B docks. Add support tower structures for intermediate landings at A, B, C, and E docks. These structures will support the landings during low water events and provide ADA accessibility through a wider range of lake elevations.

Estimated Cost Range: \$375,000 to \$425,000



Dock Realignments with Head Piers



4.0 Consensus Plan

16. Public Beach

The addition of a public beach to the Dillon waterfront is a long-standing desire. An area west of the back of the amphitheater building is conducive to the slopes best for a beach. The area is somewhat U-shaped, which is often found at public beaches on large water bodies. A great public beach is attainable with minimal grading and supplemental sand.

An accessible sidewalk links the public beach to the existing linear parking lot along West Lodgepole Drive. The sidewalk also provides a paved connection to the existing transient dock located in Marina Park.

Approval by the Denver Water Board is a requirement.

Reason for Priority: A community desired waterfront amenity.

Actions:

- Excavation and development of shoreline protection structures to allow a beach to be created and maintained.
- Development of the beach and adjacent paths and vegetation.

Estimated Cost Range: \$350,000 to \$400,000.



Public Beach with Accessible Walk Connection





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5.0 Implementation Strategy

5.1 IMPLEMENTATION STRATEGY

MARINA AND WATERFRONT PROJECT IDENTIFICATION

Developing an approach to continue the development of the marina requires prioritization of needs, costs, revenues, and potential funding resources. Non-marina related projects might have other funding resources whereas the marina itself has its own enterprise funding from operation profits. Previously the largest project at the marina, the service yard expansion, over \$2 million project that include the placement of a steel sheet wall, stormwater management structure, utility lines, and paving. Special financing by the Town of Dillon created the opportunity for the expansion, which is highly beneficial to maintaining the vitality of the marina.

Multiple strategies are available moving forward with projects such as enterprise funding, grants, bonds (possible) and loans.

Enterprise funding provides more than \$90,000/year and the debt service will begin to decline in 2022. The enterprise funding may not support large endeavors but with innovative strategies, other mechanisms of funding sources are an option.

Based on feedback from stakeholders project prioritization is as follows:

1. Wave Attenuator and Pop Up Stores
 - a. Move and extend wave attenuator \$ 650,000
 - b. Pop Up Stores \$ 465,000
2. Service Area Upgrades
 - a. Service Building \$ 700,000
 - b. Service Launch Ramp \$ 120,000
3. Parking Structure Complex
 - a. Parking Structure \$18,900,000
 - b. Multipurpose Building \$ 2,400,000
4. Shoreline Enhancements
 - a. Shoreline improvements \$ 882,000
 - b. Fuel System upgrades \$ 450,000
5. Emergency Service Road \$ 350,000
6. Dock Reconfiguration \$ 300,000
7. New Beach \$ 400,000

The project listing is in a recommended order of completion. The list is fluid and changes can occur, especially if funding becomes available for individual projects.

5.2 Sequencing and Funding

The wave attenuator and pop up stores are a priority for multiple reasons. In the current configuration, the launch ramp is exposed to wave action from the longest fetch on the lake. The wave action intensifies due to wave reflection from the attenuator at its current location. Relocating the attenuator to protect the launch ramp resolves the issue. Extending the attenuator provides added wave protection at the slips and is an opportunity for additional slip revenues and a water taxi dock that will serve as a Town Center access point. The wave attenuator extension falls within a marina revenue generator and related to the financing of the project.

The Pop Up Stores project is one identified by the stakeholders as an opportunity to have some unique features in Dillon that tie together the Town Center and waterfront. The Pop Up Stores as low cost structure with appropriate rental agreements has the have the potential for revenue generation along the waterfront. The addition of a walkway from the Pop Up Stores to the Town Core will accommodate pedestrians with an accessible connection.

Funding for the pop up stores and the walkways to the Town Center are more properly a Town of Dillon expense. Exploration of community and economic development grants are potential funding sources for pedestrian walkway connections. The costs of the buildings should be an expense to the lessees of the spaces with rents for space and utilities negotiated with those users. Next, the service area upgrades begins the separation of the service and industrial work form the public spaces within the marina. Moving the service building to the east also prepares the site of the future parking structure and multipurpose building. Funding for the new building and launch ramp is marina related cost.

The parking structure and multipurpose building define the unique image of the Town of Dillon in Summit County. An essential improvement, the parking structure, is expensive and will require significant creative financing to construct. The multipurpose building consolidates several marina services into a centrally located facility that adds restaurant and hospitality features.

The Town of Dillon will direct the funding for the parking structure and multipurpose building. Economic development grants may assist with making these projects fundable by bringing in a partner such as a dedicated user from outside the community by helping to defray cost burden from solely on the Town. Success for this project will depend on aggressive marketing to ensure the highest reasonable occupancy.

Shoreline enhancements and a new fuel system are desirable improvements with limited return on investment. Both projects may delay until a necessity, but the gabions baskets will probably require replacement within the next ten years. The age of the fuel system may result in the need for replacement as well. Both the shoreline enhancements and fuel system are marina enhancements that marina revenues fund. Neither project can expect a meaningful increase in revenues.



Dock Reconfiguration would allow for additional slips while reducing overall maintenance costs. Adding intermediate structures to support gangway landings eliminates the costs of seasonal dock management by effectively accommodating low water conditions. Marina revenues are the finances for the dock reconfiguration.

Short Term Strategies

Funding for waterfront improvements require a mix of resources. Enterprise funding from marina revenues including: TIF financing, grants, loans, and direct budget financing through the town's internal resources are examples.

Design should begin immediately. Projects like the wave attenuator and Pop Up Store can begin in 2020 and will continue to enhance the marina's reputation as a destination.

Searching for funding sources is a priority. Grants take time to acquire, applications are highly dependent on the grant cycle calendar, and missing cutoff dates can delay funding by a year. Infrastructure projects early in the process. Implementing utility connects prepare the site for projects by locating links to future uses.

5.3 Phasing

From the 2008 Dillon Waterfront Master Plan a series of implementation projects meet a flow somewhat sustainable to the finances of the Town and Marina. In some cases, project deferrals arose when finances became an issue. Strategic planning combined with budgeting will provide a flow for future projects. Most of the projects in the 2020 Dillon Waterfront Master Plan are enhancements with a few identified at the top of the list are essential due to either a failing or exacerbating condition.

The sequencing found in this master plan document is the summation of the discussion with stakeholders and Town staff. If unique funding opportunities present itself, prioritization of projects becomes fluid to meet the circumstance.

5.4 Recommendations

The Dillon Marina is a successful example of maintaining a facility while incrementally improving at the same time. In 2012, the Dillon Marina won the Large Marina of the Year from Marina Dock Age Magazine, an industry leading publication. The process of identifying manageable projects, designing, finding funding, and building them has been a successful approach by the Town of Dillon.

Developing a parking structure for use by the marina, amphitheater, Town Core, while providing revenue generating winter storage is a priority set by the stakeholders and community. The structure is the larger identified project of the 2020 Dillon Waterfront Master

Plan and requires sequencing the relocation of several existing facilities. But, the parking structure with the multipurpose building positively impact the waterfront of Dillon.



